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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/524,408	02/14/2005	Peter Geskes	016906-0374	4673

22428 7590 10/09/2007  
FOLEY AND LARDNER LLP  
SUITE 500  
3000 K STREET NW  
WASHINGTON, DC 20007

EXAMINER
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LEO, LEONARD R

ART UNIT	PAPER NUMBER
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3744

MAIL DATE	DELIVERY MODE
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10/09/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 10/524,408	Applicant(s) GESKES ET AL.	
	Examiner Leonard R. Leo	Art Unit 3744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 June 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,3-21,23,24 and 26 is/are pending in the application.
- 4a) Of the above claim(s) 4-8,10-12,18 and 19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,9,13-17,20,21,23,24 and 26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

The amendment filed on June 14, 2007 has been entered. Claims 22 and 25 are cancelled, claims 1, 3-21, 23-24 and 26 are pending, and claims 4-12 and 18-19 remain withdrawn from further consideration.

The indicated allowability of claim 24 is withdrawn in view of the newly discovered reference(s) to Shinmura. Rejections based on the newly cited reference(s) follow.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 26 is rejected under 35 U.S.C. 102(b) as being anticipated by Parola (EP 1 014 027). Figures 7-8 of Parola discloses tube 14g having an end matching the contour of the collection manifold 18 and having a rectangular opening 38.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3, 9, 13-17, 20-21 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kado in view of Kuroyanagi et al.

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Kado discloses all the claimed limitations except both an inlet and outlet in the collection manifold. Figure 5 or 7 of Kado discloses the flat outer contour of tube 4 is “matched” to the internal contour 9c of the collection manifold 2.

Kuroyanagi et al discloses a heat exchanger comprising a number of flat tubes 42, 44 connected to collection manifold regions 8, 10-11, 13 divided by partition wall 16 such that the inlet and outlet of the heat exchanger are located on the same collection manifold for the purpose of meeting plumbing requirements.

Since Kado and Kuroyanagi et al are both from the same field of endeavor and/or analogous art, the purpose disclosed by Kuroyanagi et al would have been recognized in the pertinent art of Kado.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ in Kado both the inlet and outlet in the collection manifold for the purpose of meeting plumbing requirements as recognized by Kuroyanagi et al.

Regarding claims 14 and 23, Kuroyanagi et al discloses a single tube having a slot in the end (Figure 18) to receive longitudinal partition 16.

Regarding claim 15, Kuroyanagi et al discloses through-openings 18 in partition wall 16.

Regarding claims 20-21, Kado (Technical Field) discloses the heat exchanger employed as a condenser of an air conditioner for a vehicle.

Claims 1, 3, 9, 13-14, 16-17, 20-21 and 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe in view of Shinmura.

Watanabe discloses all the claimed limitations except both an inlet and outlet in the collection manifold.

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Shinmura discloses a heat exchanger comprising a number of flat tubes 13 connected to collection manifold 11 divided by partition wall 111 such that the inlet and outlet of the heat exchanger are located on the same collection manifold for the purpose of meeting plumbing requirements.

Since Watanabe and Shinmura are both from the same field of endeavor and/or analogous art, the purpose disclosed by Shinmura would have been recognized in the pertinent art of Watanabe.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ in Watanabe both the inlet and outlet in the collection manifold for the purpose of meeting plumbing requirements as recognized by Shinmura.

Regarding claims 14 and 23, Shinmura discloses a single tube having a slot in the end to receive partition wall 111. In the combination of Watanabe and Shinmura, the tube 17 of Shinmura would be modified to have a slot to receive the partition wall 111 of Shinmura.

Regarding claims 20-21, Watanabe (paragraph 13) discloses the heat exchanger is employed in an automobile air conditioner.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe in view of Shinmura as applied to claims 1, 3, 9, 13-14, 16-17, 20-21 and 23-24 above, and further in view of Kuroyanagi et al.

The combined teachings of Watanabe and Shinmura lacks a through-opening in the partition wall.

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Kuroyanagi et al discloses a heat exchanger comprising a number of flat tubes 42, 44 connected to collection manifold regions 8, 10-11, 13 divided by partition wall 16 with through-openings 18 for the purpose of providing multipass flow to improve heat transfer.

Since Watanabe and Kuroyanagi et al are both from the same field of endeavor and/or analogous art, the purpose disclosed by Kuroyanagi et al would have been recognized in the pertinent art of Watanabe.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ in Watanabe through-openings in the partition wall for the purpose of providing multipass flow to improve heat transfer as recognized by Kuroyanagi et al.

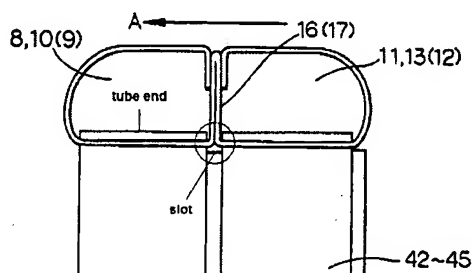
### ***Response to Arguments***

The rejection of claim 22 under 35 U.S.C. 112, first paragraph, is withdrawn in view of the claim cancellation.

Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

Regarding applicants' remarks with respect to claim 14, Figure 18 (shown below) of Kuroyanagi et al discloses an end of flat tube 42, 44 (43, 45) having a slot (circled) to accommodate the partition wall 16.

**FIG. 18**



No further comments are deemed necessary at this time.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonard R. Leo whose telephone number is (571) 272-4916. The examiner can normally be reached on Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl Tyler can be reached on (571) 272-4834834. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/ LEONARD R. LEO /  
PRIMARY EXAMINER  
ART UNIT 3744

October 3, 2007